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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,723	02/14/2006	Roland Callens	05129-00104-US 5795	
	7590 04/01/200 OVE LODGE & HUT	EXAMINER		
PO BOX 2207		PUTTLITZ, KARL J		
WILMINGTON	N, DE 19899	ART UNIT	PAPER NUMBER	
		1621		
			MAIL DATE	DELIVERY MODE
			04/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application I	No.	Applicant(s)			
Office Action Summary		10/551,723		CALLENS ET AL.			
		Examiner		Art Unit			
		KARL J. PUT	TLITZ	1621			
The MAILING DA Period for Reply	ATE of this communication a	appears on the co	ver sheet with the c	orrespondence ad	dress		
A SHORTENED STATI WHICHEVER IS LONG - Extensions of time may be ave after SIX (6) MONTHS from the - If NO period for reply is specific - Failure to reply within the set of	JTORY PERIOD FOR REF SER, FROM THE MAILING silable under the provisions of 37 CFR e mailing date of this communication. ed above, the maximum statutory perion or extended period for reply will, by status the later than three months after the maint. See 37 CFR 1.704(b).	DATE OF THIS 1.136(a). In no event, I od will apply and will ex tute, cause the applicati	COMMUNICATION however, may a reply be tim pire SIX (6) MONTHS from to become ABANDONED	I.  ely filed  the mailing date of this co O (35 U.S.C. § 133).			
Status							
2a) ☐ This action is <b>FIN</b> 3) ☐ Since this applica	mmunication(s) filed on <u>03</u> IAL. 2b)⊠ Thation is in condition for allowance with the practice unde	his action is non- vance except for	formal matters, pro		e merits is		
Disposition of Claims							
4a) Of the above  5) ☐ Claim(s) is  6) ☑ Claim(s) 1-16 is/a  7) ☐ Claim(s) is  8) ☐ Claim(s) a  Application Papers  9) ☐ The specification  10) ☐ The drawing(s) file  Applicant may not Replacement draw	are rejected.  b/are objected to.  re subject to restriction and is objected to by the Examined on is/are: a) arequest that any objection to the ing sheet(s) including the corresponding sheet(s)	rawn from consideration required or b)  the drawing(s) be hection is required in	lirement. objected to by the E eld in abeyance. See f the drawing(s) is obj	937 CFR 1.85(a). ected to. See 37 CF	• /		
,	ration is objected to by the	Examiner, Note	the attached Office	Action or form P1	O-152.		
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)  1) ☑ Notice of References Cited 2) ☐ Notice of Draftsperson's Pa 3) ☑ Information Disclosure Stat Paper No(s)/Mail Date 10/3	tent Drawing Review (PTO-948) ement(s) (PTO/SB/08)	4) 5) 6)	Interview Summary Paper No(s)/Mail Da Notice of Informal Pa Other:	te			

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9, 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what is being hydrolyzed in formula 1, especially if R3 is an organic residue.

It is unclear in claim 1 if T1 and R2 each separately for cyclic substituents, or they form a cyclic substituent together.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 199829561 (WO 561).

WO 561 teaches preparation of the following compound:

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$$X \longrightarrow R^{2}$$

$$X \longrightarrow CO_{2}H$$

$$(II)$$
from

lipase, see pages 3 and 4.

### Claim Rejections - 35 USC § 103

using a

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forro et al., Mini-Reviews in Organic Chemistry (2004), 1(1), 93-102 (Forro) or Forro et al., Organic Letters (2003), 5(8), 1209-1212 (Forro II) or Kanerva et al., Tetrahedron: Asymmetry (1996), 7(6), 1705-1716 (Kanerva) in view of WO 561.

Forro II teaches the following reactions:

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and Kanerva teaches the following reaction:

Notwithstanding that Forro II and Kanerva do not teach the specific compounds required by the claims, Forro and WO 561 teach the required compounds can be made by lipase hydrolysis. For example, Foro teaches the following reactions:

$$\begin{array}{c|c} R^2 & COOEnz & NuH \\ \hline R^3 & NH-R^1 & EnzOH \\ \hline & acyl enzyme \\ intermediate \\ \hline & R^2 & CONu \\ \hline & R^3 & NH-R^1 \end{array}$$

Scheme 1.

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Therefore, it would be well within the purview of those of ordinary skill to any desired beta amino acid by lipase hydrolysis, including those of the instant invention.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl J. Puttlitz whose telephone number is (571) 272-0645. The examiner can normally be reached on Monday to Friday from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached at telephone number (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Karl J. Puttlitz/

Primary Examiner, Art Unit 1621